Docket No. 1232-4590US2

TED STATES PATENT AND TRADEMARK OFFICE

Applicants : Kazutaka YANAGITA, et al.

Serial No. : 10/639,460

Art Unit: To be assigned

Filed : August 13, 2003 Examiner: To be assigned

For

· SAMPLE PROCESSING SYSTEM

## SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to Rule 56, Applicants hereby call the attention of the Patent Office to the references listed on the attached Form PTO 1449. The attached Form PTO-1449 is to replace the PTO-1449 Forms filed on September 15, 2003 and August 13, 2003, to correct minor typographical errors in items BU and BV. Copies of these references \( \sum \) are not attached & \( \sum \) were filed or cited in parent application U.S. Serial No(s) 10/153,608, filed May 24, 2002, 09/434,741 filed November 5, 1999, and 09/435,285 filed November 5, 1999.

Ш	This document is being filed within three (3) months of the filing date of the application
	A check for the requisite fee of \$180 is enclosed.
П	This document is being concurrently filed with the above-identified application

This document is being concurrently filed with an Request for Continued Examination (RCE)

 $\boxtimes$ This document is being filed prior to a first Office Action

This document is accompanied by a Search Report/Communication cited in a corresponding PCT or foreign counterpart application.

The Commissioner is hereby authorized to charge any additional fees which may be required for this Information Disclosure Statement, or credit any overpayment to Deposit Account No. 13-4503, Order No. 1232-4590US2.

Respectfully submitted, MORGAN & FINNEGAN, L.L.P.

Dated: November 17, 2003

Jala St Stan By:

Correspondence Address: MORGAN & FINNEGAN, L.L.P. 345 Park Avenue New York, NY 10154-0053

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INFORMATION DISCLOSURE CITATION

X18 = 30%

Attorney Docket:	Serial No.:
1232-4590US2	10/639,460
Applicants:	Examiner:
Yanagita et al.	to be assigned
Filing Date:	Group Art Unit:
August 13, 2003	to be assigned

# I S PATENT DOCUMENTS

Examiner Initial		Patent Number	Publication Date	Name	Class	Sub- Class	Filing Date
	AA	3,493,155	02/03/70	Irving Litant et al.	225	2	
	AB	3,549,446	12//22/70	R.W. Bennett et al.	156	230	
	AC	3,667,661	06/06/72	Farmer	225	2	
	AD	3,730,410	05/01/73	Altshuler	225	96.5	
	AE	4,962,879	10/16/90	Goesele et al.	156	281X	
	AF	5,100,544	03/31/92	Izutani, et al.	210	75	
	AG	5,255,853	10/26/93	Munoz	83	177X	
	AH	5,374,564	12/20/94	Bruel	437	24	
	AI	5,379,235	01/03/95	Fisher et al.	364	508	

### FOREIGN PATENT DOCUMENTS

POREIGN TATENT DOCUMENTS							
Examiner Initial		Patent Number	Publication Date	Country	Class	Sub- Class	Translation
	AJ	KR 1998-33377	0/75/98	Korean			☐ Yes ☐ No
	AK	EP 0 709 876 A1	05/01/96	Europe			☐ Yes ☐ No
	AL	EP 0 840 381 A2	05/06/98	Europe			⊠ Yes □ No
	AM	EP 0 843 345 A2	5/20/98	Europe			☐ Yes ☐ No

### OTHER DOCUMENTS (Including Author, Title, Date, etc.)

AN	"Single-Crystal Silicon on Non-Single-Crystal Insulators", G.W. Cullen, <u>Journal of Crystal Growth</u> , Vol. 63, No. 3, pp. 429-590, 1983
AO	"Crystalline Quality of Silicon Layer Formed by FIPOS Technology", Kazuo IMAI et al., <u>Journal of Crystal</u> <u>Growth</u> , Vol. 63, pp 547-553, 1987
A D	"Silicon-On-Insulator by Wafer Bonding: A Review", W.P. Maszara, Journal of Electrochemical Society, Vol.

AP 138, pp. 341-347, 1991

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP \$609.

Draw line through citation if not in conformance and not considered.

Include copy of this form with next communication to Applicant.

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		Page Z of 3
Attorney Docket:	Serial No.:	
1232-4590US2	10/639,460	
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Yanagita et al.	to be assigned	
Filing Date:	Group Art Unit:	
August 13, 2003	to be assigned	

### U.S. PATENT DOCUMENTS

Examiner Initial		Patent Number	Publication Date	Name	Class	Sub- Class	Filing Date
	AQ	5,510,019	4/23/96	Yabumoto et al.	210	137	
	AR	5,747,387	05/05/98	Koizumi et al.	438	906X	
	AS	5,783,022	07/21/98	Cha et al.	156	344	
	AT	5,849,602	12/15/98	Okamura et al.	438	908X	
	AU	5,876,497	03/02/99	Atoji	117	85	
	AV	5,928,389	7/27/99	Jevtic	29	25.01	
	AW	5,934,856	08/10/99	Asakawa et al.	414	217	
	AX	5,994,207	11/30/99	Henley et al.	438	515	02/19/98
	AY	6,122,566	09/19/00	Nguyen et al.	438	908X	03/03/98

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	AZ	EP 0 999 578 A2	05/10/00	Europe			⊠ Yes □ No
	BA	EP 1 026 729 A2	08/09/00	Europe			⊠ Yes □ No
	ВВ	EP 1 045 448 A1	10/18/00	Europe			☐ Yes ☐ No
	BC	EP 0 926 719 A2	06/30/99	Europe			☐ Yes ☐ No

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BD	"Light Scattering Topography Characterization of Bonded SOI Wafer", H. Baumgart, et al., Extended Abstracts, Vol. 91-2, pp. 733-734, 1991
BE	"Thinning of Bonded Wafer: Etch-Stop Approaches", Charges E. Hunt et al., Extended Abstracts, Vol. 91-2, pp. 696-697, 1991
BF	"Epitaxial Layer Transfer by Bond and Etch Back of Porous Si", Takao Yonehara et al., Applied Physics

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## FORM PTO-1449

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Attorney Docket: 1232-4590US2	Serial No.: 10/639,460
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August 13 2003	to be assigned

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			U.S. PA	TENT DOCUMENTS			
Examiner Initial		Patent Number	Publication Date	Name	Class	Sub- Class	Filing Date
	BG	6,221,740	4/24/01	Bryan et al.	438	458	
	ВН	6,277,234 B1	8/21/01	Freund et al.	156	344	
	BI	6,321,134 B1	11/20/01	Henley et al.	700	121	11/20/01
	BJ	5,570,994	11/5/1996	Somekh et al.	414	786	5/10/1995
	BK	2,191,513	2/27/40	W. P. Bigelow	141	7	3/13/37
	BL	2,517,394	8/1/50	Z. U. Le Tellier	134	80	2/19/45
	BM	3,094,207	6/18/63	R. G. Millhiser et al.	198	209	5/24/61
	BN	3,489,608	1/13/70	B. Jacobs et al.	134	25	10/26/65
	во	3,970,471	7/20/76	Bankes et al.	134	6	4/23/75
			FOREIGN	PATENT DOCUMENTS			
Examiner Initial		Document Number	Publication Date	Country	Class	Sub- Class	Translati n
	ВР	5-21338	1/29/93	Japan			English Abstract
	BQ	7-302889	11/14/95	Japan			English Abstract
	BR	WO 99/06110	02/11/99	wo			Yes No
	BS	WO 01/04933	01/18/01	wo			☐ Yes ☐ No
	BT	WO 01/10644 A1	02/15/01	wo			Yes No
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	BU	"Electrolytic Shap: 333-347, 1956	ing of Germaniı	nm and Silicon", A. Uhlir et al	., Bell System Tec	hnical Journa	l, Vol. 35, pp.
	BV	"Oxidized Porous Silicon and It's Application", K. Nagano et al., The Transactions of the Institute of Electronics and Communication Engineers. The Institute of Electronics. Information and Communication Engineers, Vol. 79, pp. 49-54, SSD 79-954-91, 1979					
	BW	"A New Dielectric 159-164, 1981	Isolation Metho	od Using Porous Silicon", K. I	mai, Solid -State I	Electronics, \	/ol. 224, pp.
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FORM PTO-1424 PARAMETERS INFORMATION DISCLOSURE CITATION

Attorney Docket:	Serial No.:
1232-4590US2	10/639,460
Applicants	Examiner:
Yanagita et al.	to be assigned
Filing Date:	Group Art Unit:
August 13, 2003	to be assigned

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Examiner Initial		Patent Number	Publication Date	Name	Class	Sub- Class	Filing Date
	BX	4,047,973	9/13/77	Williams	134	10	10/27/76
	BY	4,208,760	6/24/80	Dexter et al.	15	302	12/19/77
	BZ	4,215,928	8/5/80	Bayley et al.	354	319	3/30/79
	CA	4,850,381	7/25/89	Moe et al.	134	62	2/1/88
-	СВ	5,248,886	9/28/93	Asakawa et al.	250	442.11	2/27/92
	CC	5,357,645	10/25/94	Onodera	15	97.1	5/14/93
	CD	5,653,247	8/5/1997	Murakami	134	80	8/14/95
	CE	5,679,405	10/21/97	Thomas et al.	427	248.1	7/24/95
	CF	5,792,709	8/11/98	Robinson et al.	438	692	12/19/95

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	CG	JPA 56-30650	3/27/81	Japan			Abstract Only
	СН	JPA60-05530	1/14/94	Japan			English Abstract
	CI	JPA4-293236	10/16/92	Japan			English Abstract

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CJ	Electronic Materials, vol. 20, pp. 267-277, 1991
CK	Michel Bruel, et al. "Smart-Cut: A New Silicon On Insulator Material Technology Based On Hydrogen Implantation And Wafer Bonding", Jpn. J. Appl. Phys. Vol. 36, No. 3B, Part 01, March 1, 1997, pages 1636- 1641
	U.S. Application Social No. 00/300 643, filed September 20, 2002, aptitled "Separating Appearating App

CL U.S. Application Senal No. 09/399,043, filed September 20, 2002, entitled "Separating Apparatus and Method, and Substrate Manufacturing Method."

| Date Considered | | Date Considered | |

"Silicon on Insulator Material by Wafer Bonding", Christine Harendt, Charles E. Hunt et al., Journal of

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Attorney Docket: Serial No.: 1232-4590US2 10/639,460 Applicants: Examiner: Yanagita et al. to be assigned Filing Date: Group Art Unit: to be assigned

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## August 13, 2003 HE DATENT DOCUMENTS

Examiner Initial		Patent Number	Publication Date	Name	Class	Sub- Class	Filing Date
	СМ	5,795,401	8/18/98	Itoh et al.	134	6	10/10/96
	CN	5,810,028	9/22/98	Ichikawa et al.	134	66	6/12/97
	СО	5,820,329	10/13/98	Derbinski et al.	414	225	4/10/97
***	CP	5,954,888	9/21/99	Gupta et al.	134	3	2/9/98
	CQ	6,007,675	12/28/99	Toshima	156	345	12/1/97
	CR	6,168,499	1/2/2001	Jang	451	8	5/18/99
	CS	4,915,564	4/10/90	Eror et al.	414	217	7/20/98
	CT	6,131,589	10/17/00	Vogtmann et al.	134	113	2/9/99
	CU	6,382,292	5/7/02	Ohmi et al.	156	584	3/25/98
	CV	6,418,999	7/16/02	Yanagita et al.	156	584	12/15/98
	CW	6,527,031	3/4/03	Yanagita et al	156	584	11/5/99
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	CX	JPA63-16455	11/15/94	Japan			English Abstract
	CY	JPA9-167724	6/24/97	Japan			English Abstract
	CZ						Yes No

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DA	U.S. Application Serial No. 09/434,740, filed November 11, 2002, entitled "Sample Separating Apparatus and Method."
DB	U.S Application No. 09/434,663, filed November 5, 1999, entitled "Sample Processing System," to K. Yanagita et al.
DC	"History of Water Jet Machining Development", Journal of the Water Jet Technology Society of Japan, vol. 1, No. 1, pages 4-15, 1984

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